WHAT IS CLAIMED IS:

1. A method of editing outbound frames using an offload unit, comprising:

receiving a delegated connection table index;

receiving a prototype header and data for transmission from a TCP stack;

accessing a delegated connection table entry using the delegated

connection table index;

computing a TCP checksum based on a portion of the data for

transmission; and

outputting a frame including the TCP checksum, and the portion of the

data for transmission.

2. The method of claim 1, further comprising updating the delegated connection

table entry.

3. The method of claim 1, wherein the frame includes a received data

acknowledgement number.

4. The method of claim 3, wherein the received data acknowledgement number

is obtained from the delegated connection table entry.

5. The method of claim 3, wherein the received data acknowledgement number

is updated when a data is received from the destination.

6. The method of claim 1, wherein the frame includes a TCP timestamp.

7. The method of claim 6, wherein the timestamp is read from the delegated

connection table entry.

8. The method of claim 6, wherein the TCP timestamp is updated when data is

received from the destination.

9. The method of claim 1, further comprising computing an IPv4 header checksum when a delegated connection is an IPv4-based connection.

10. The method of claim 1, further comprising:

accessing the connection table entry;

computing a TCP checksum based on another portion of the data for transmission; and

outputting an additional frame including the TCP checksum and the other portion of the data for transmission.

11. The method of claim 1, wherein the application program requests notification when a destination has acknowledged receipt of a specific sequence number.

12. The method of claim 1, further comprising piggybacking an acknowledgement in the frame.

13. A method of producing receive data acknowledgements for output to a destination using an offload unit, comprising:

receiving a TCP frame from a destination connection;

determining the destination connection is a connection delegated for processing by the offload unit;

determining a sequence number in the TCP frame is consecutive relative to a sequence number stored in a delegated connection table; and

updating the sequence number stored in the delegated connection table.

14. The method of claim 13, further comprising:

determining the received sequence number is greater than a threshold; and

transmitting a receive data acknowledgement to the destination.

15. The method of claim 13, further comprising:

determining a timer has expired; and

transmitting a receive data acknowledgement to the destination.

16. The method of claim 13, further comprising:

determining a count of unacknowledged received frames is greater than a

limit; and

transmitting a receive data acknowledgement to the destination.

17. A method of communicating receive data acknowledgement state from an

offload unit to an application program, comprising:

updating connection state data stored in a delegated connection table;

and

comparing a portion of the connection state data to a threshold to set a

notification flag.

18. The method of claim 17, further comprising:

outputting a notification to the application program responsive to the

notification flag value; and

updating at least a portion of the connection state data.

19. The method of claim 17, wherein the threshold is a timer value.

20. The method of claim 17, wherein the threshold is a count of unacknowledged

received frames.

21. The method of claim 17, wherein the threshold is a received sequence

number.

22. An apparatus for editing outbound frames, comprising:

    means for determining an IPv4 checksum;

    means for determining a TCP checksum;

    means for obtaining connection state data for a delegated connection; and

    means for constructing a frame for transmission at least partially responsive to the current connection state data.

23. The apparatus of claim 22, wherein the state connection data includes a received sequence number.

24. The apparatus of claim 22, wherein the state connection data includes a TCP timestamp.

25. The apparatus of claim 22, wherein the frame for transmission includes a received data acknowledgement.